

FIG. 1

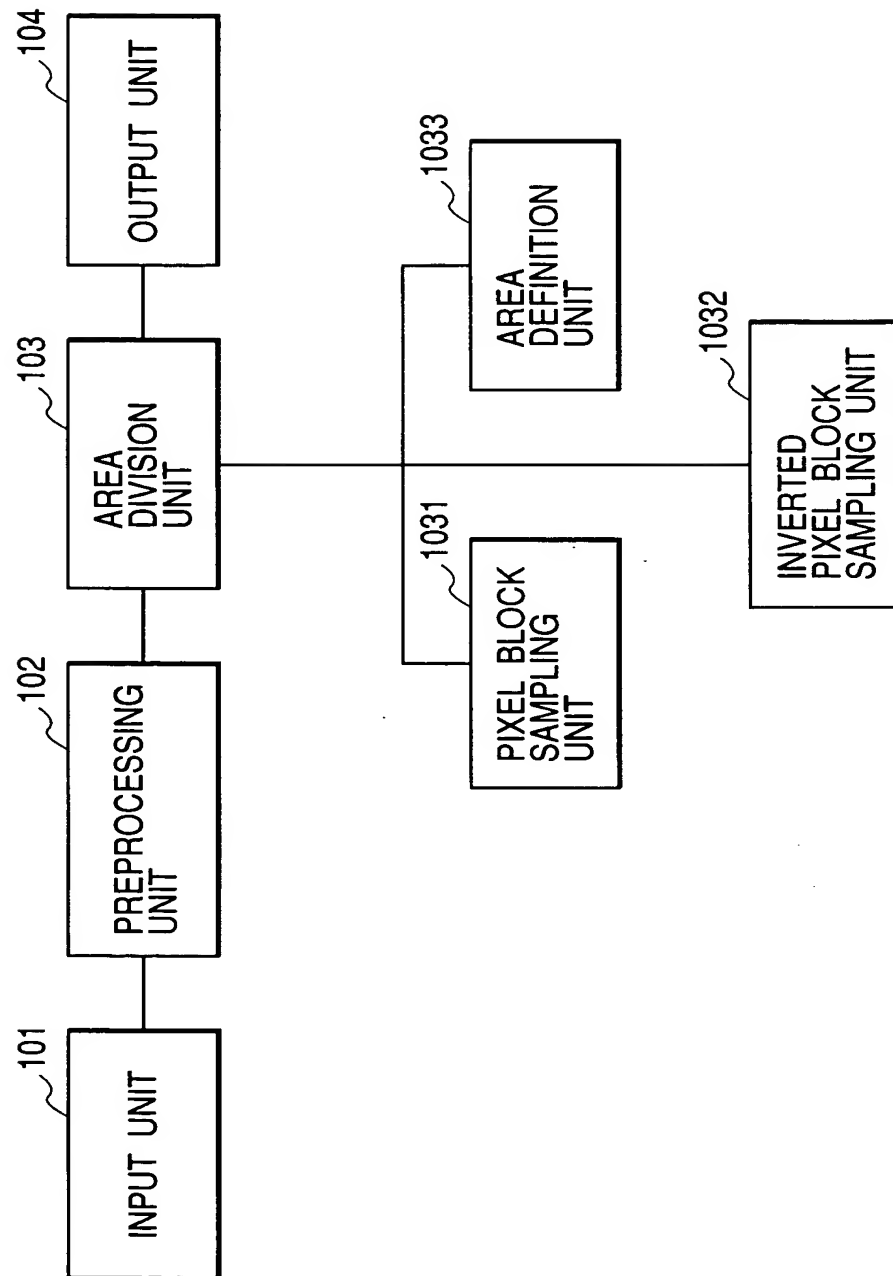


FIG. 2

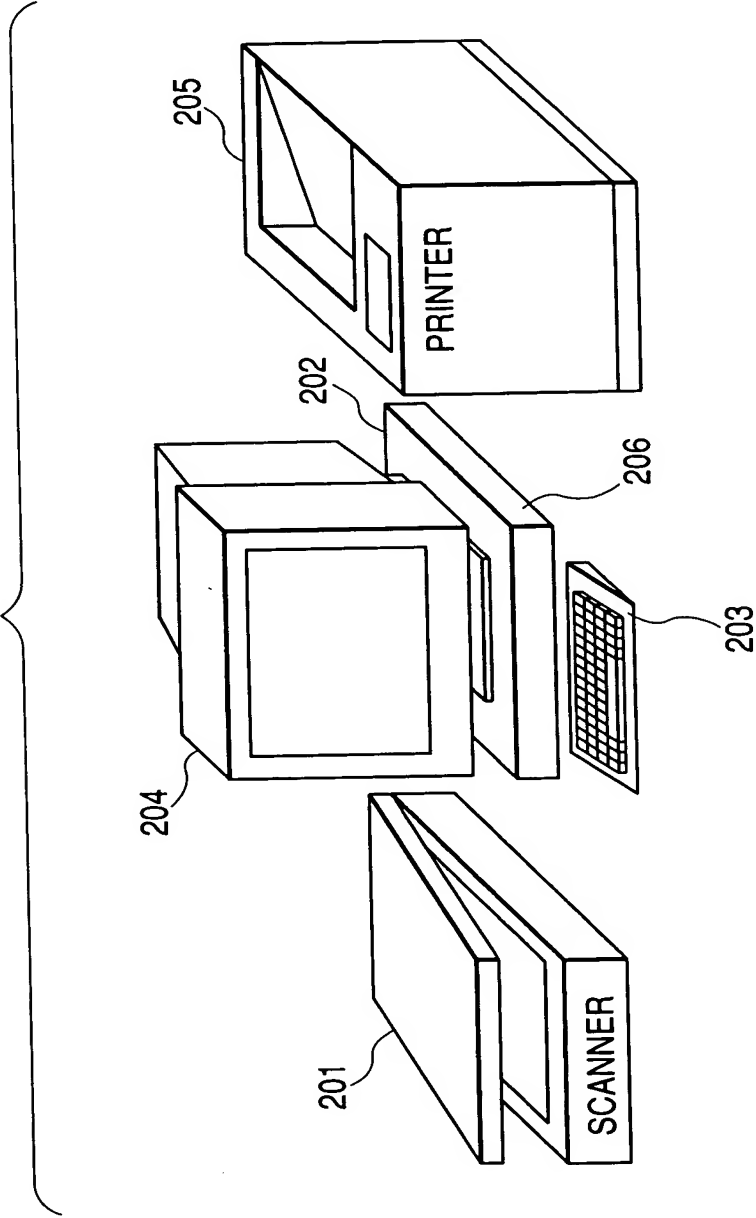


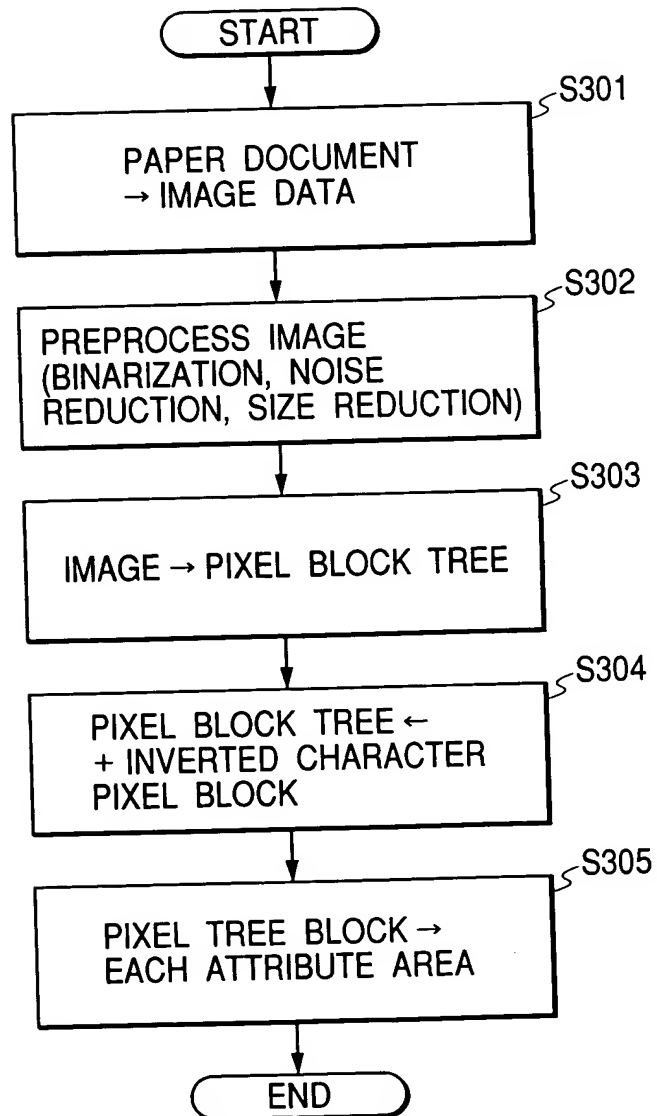
FIG. 3

FIG. 4

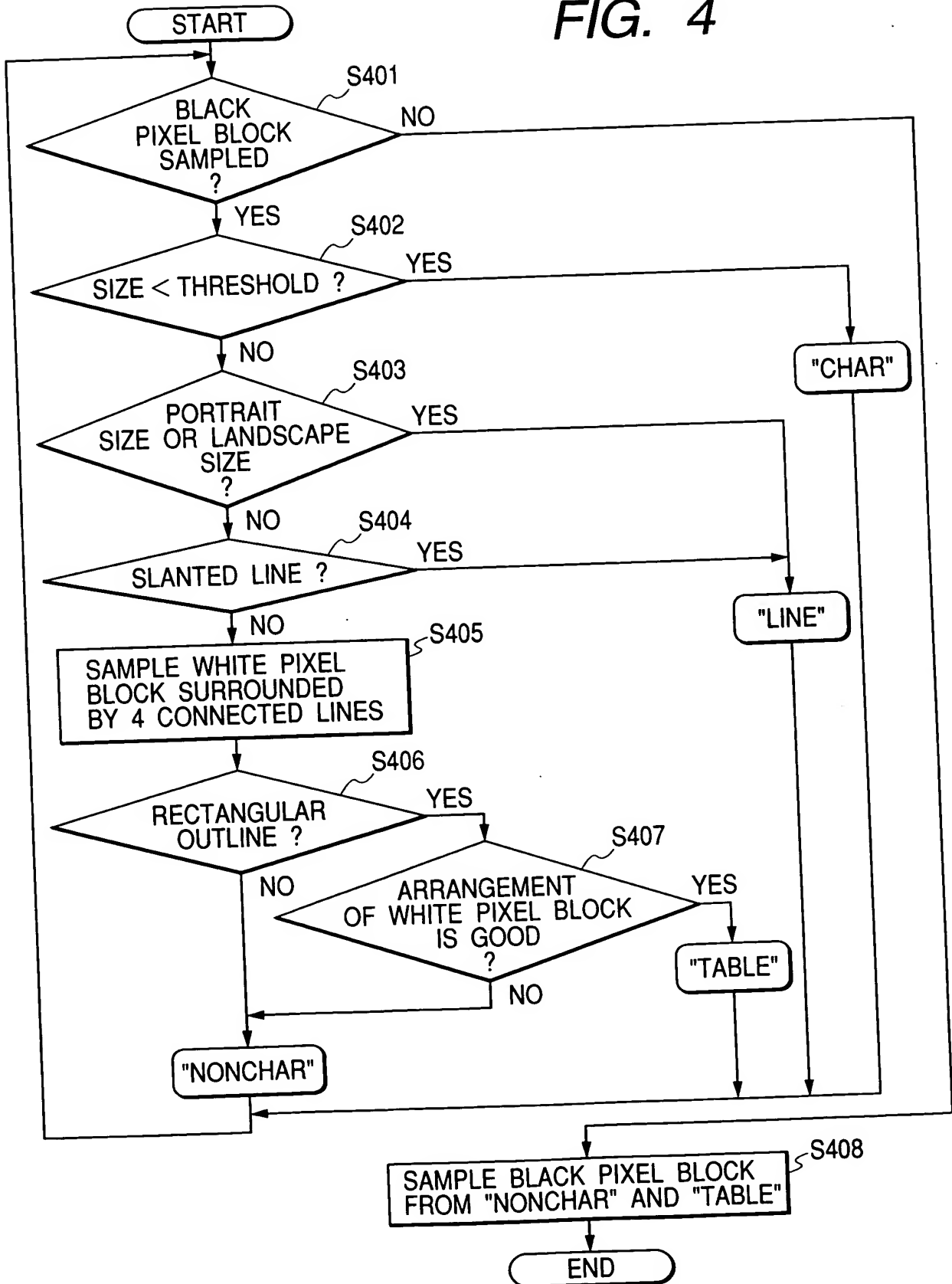


FIG. 5

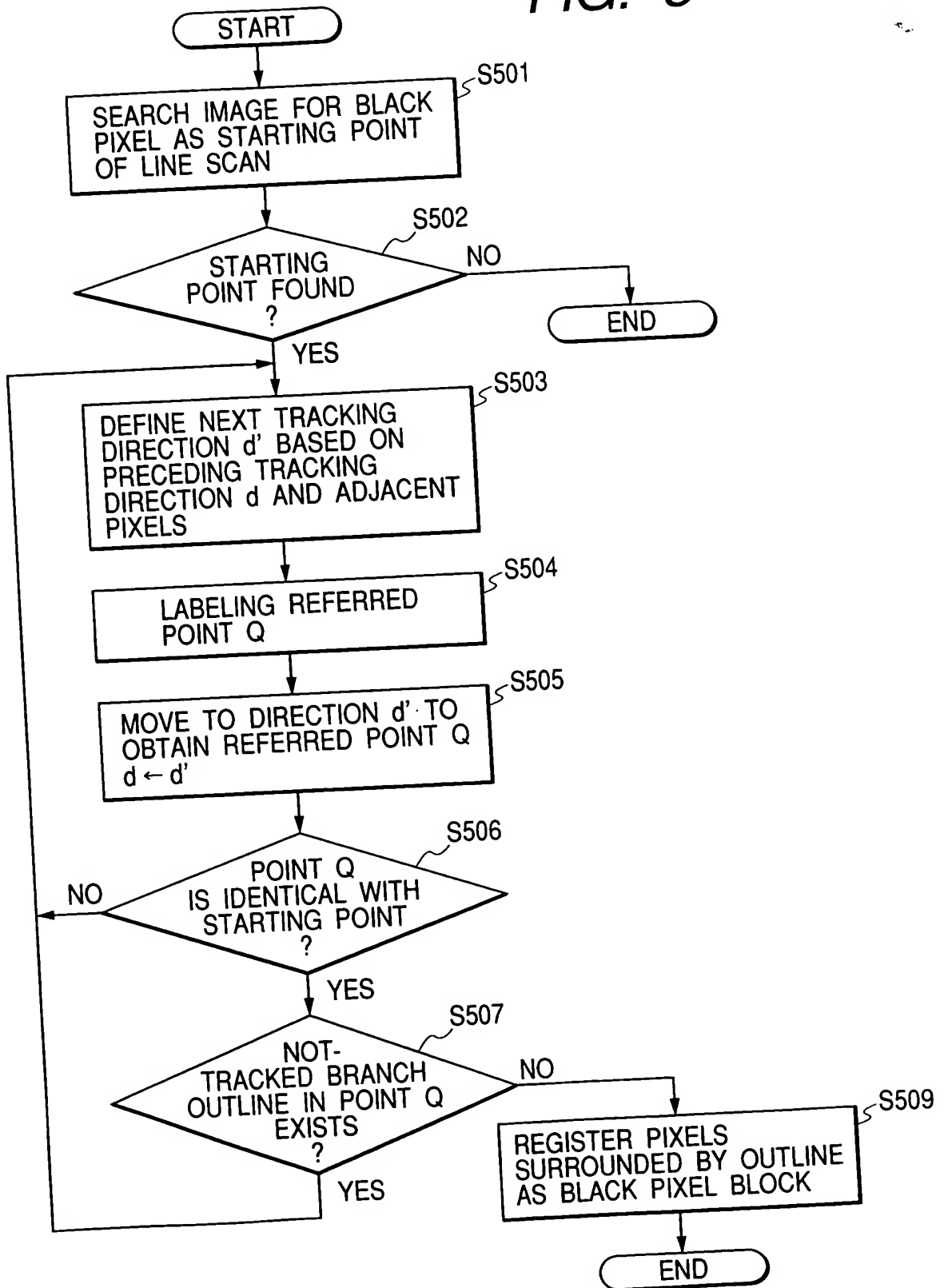


FIG. 6

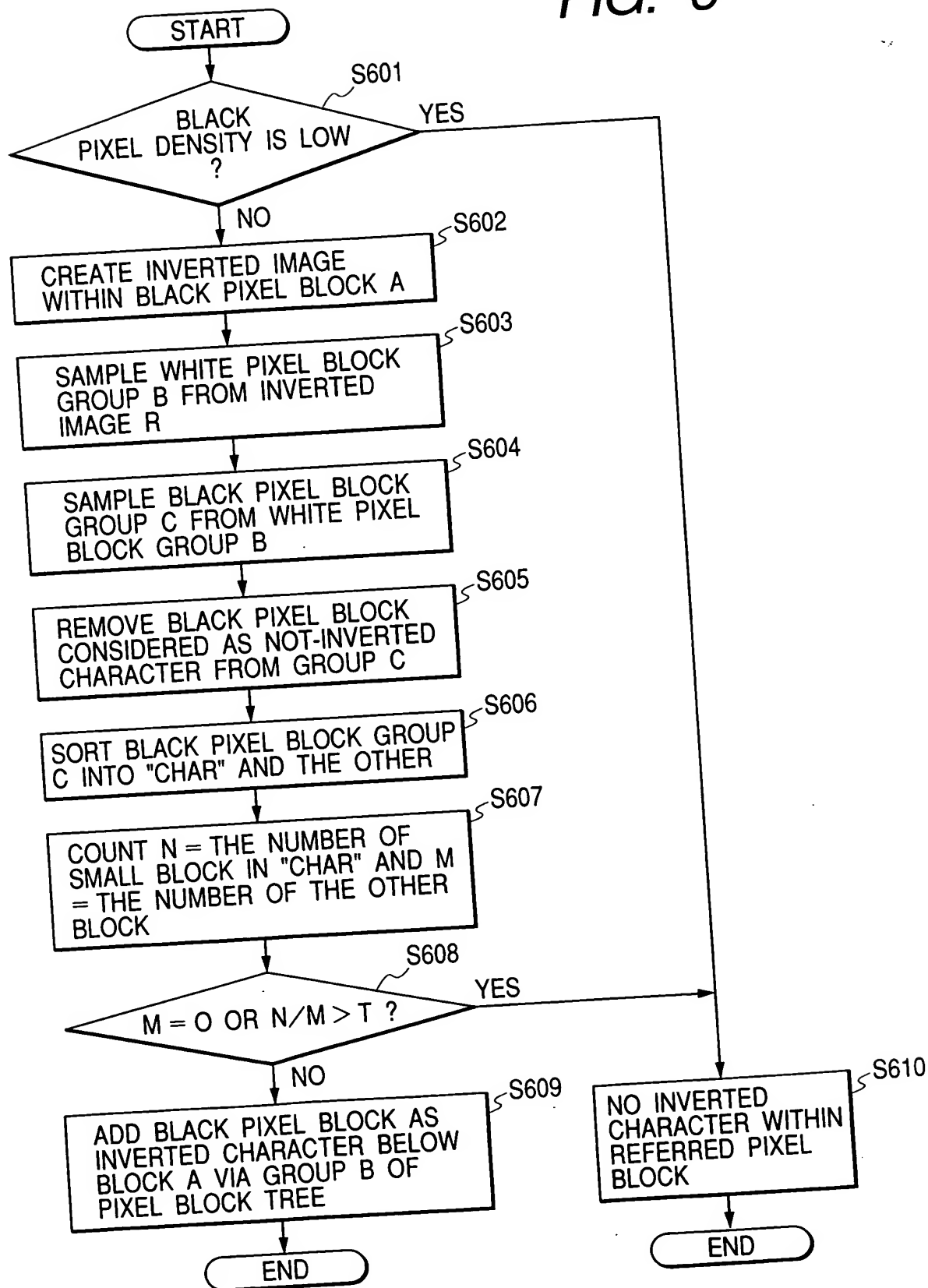


FIG. 7

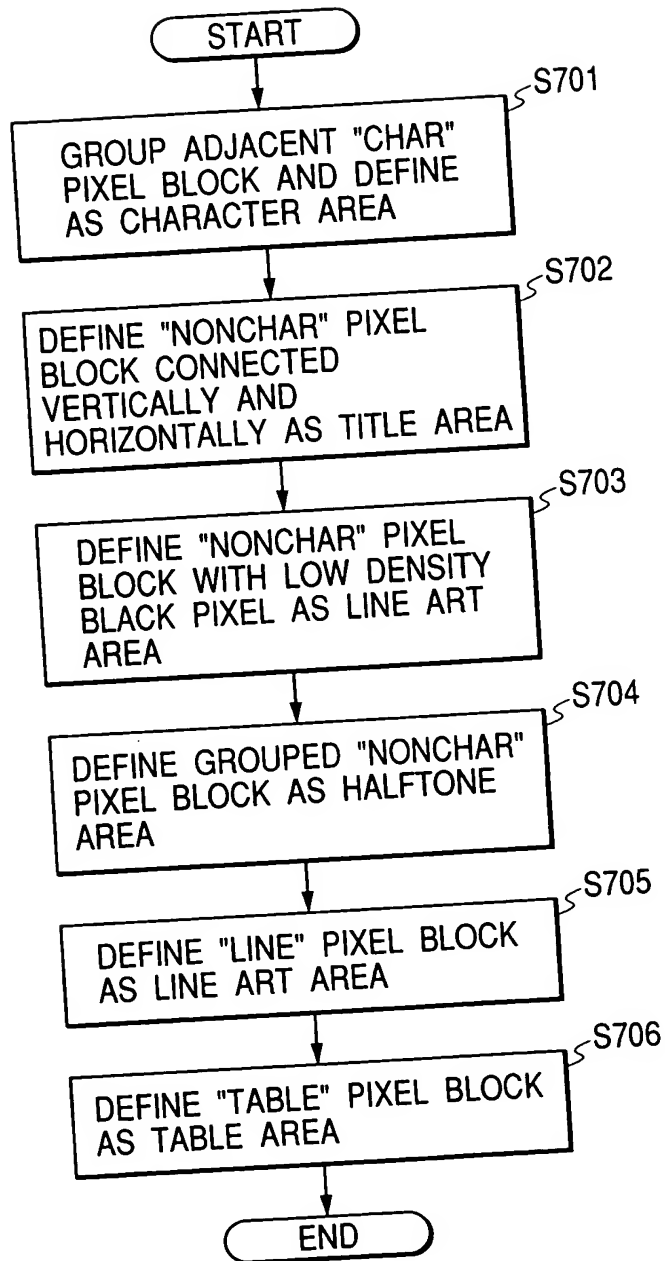


FIG. 8

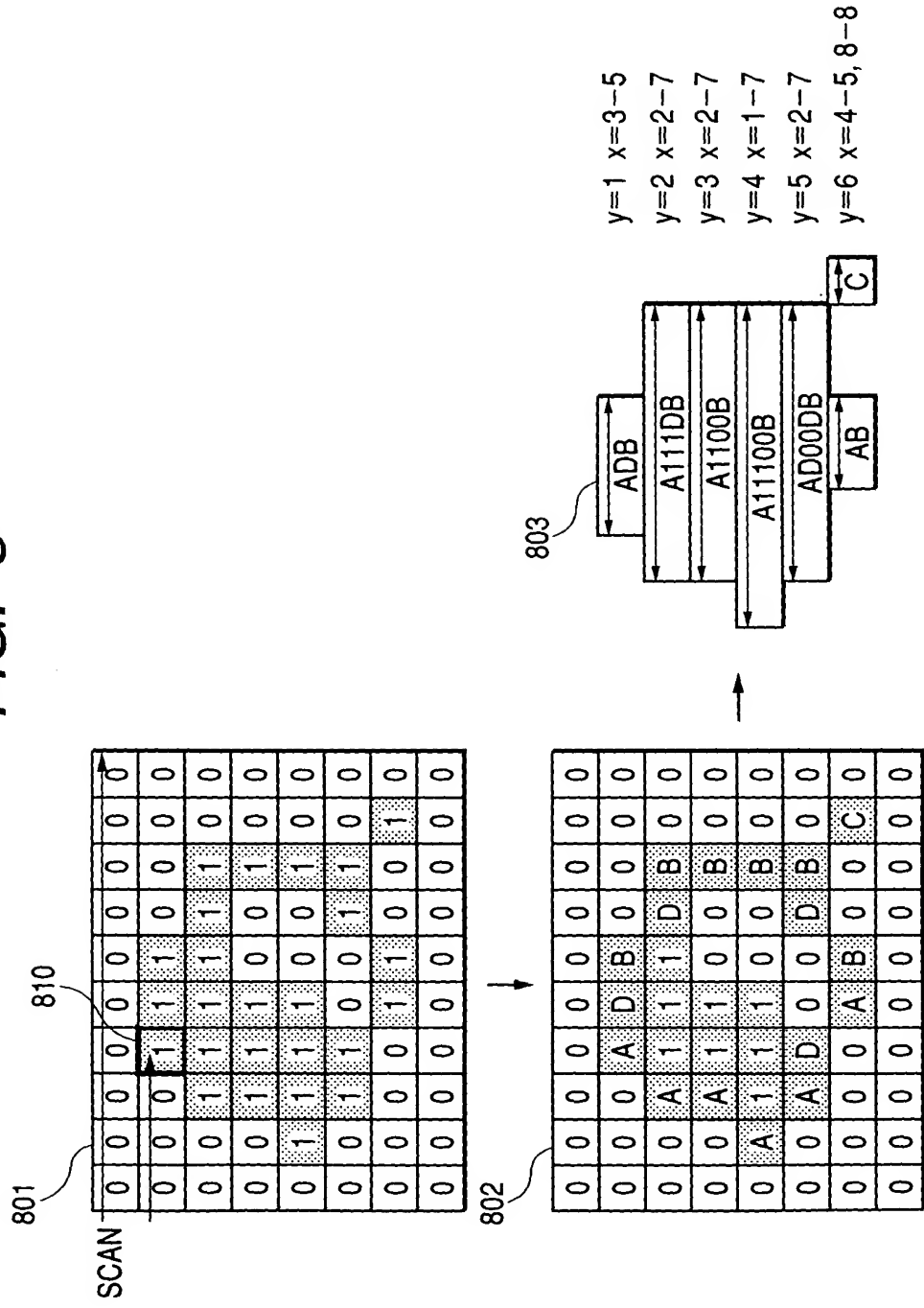


FIG. 9

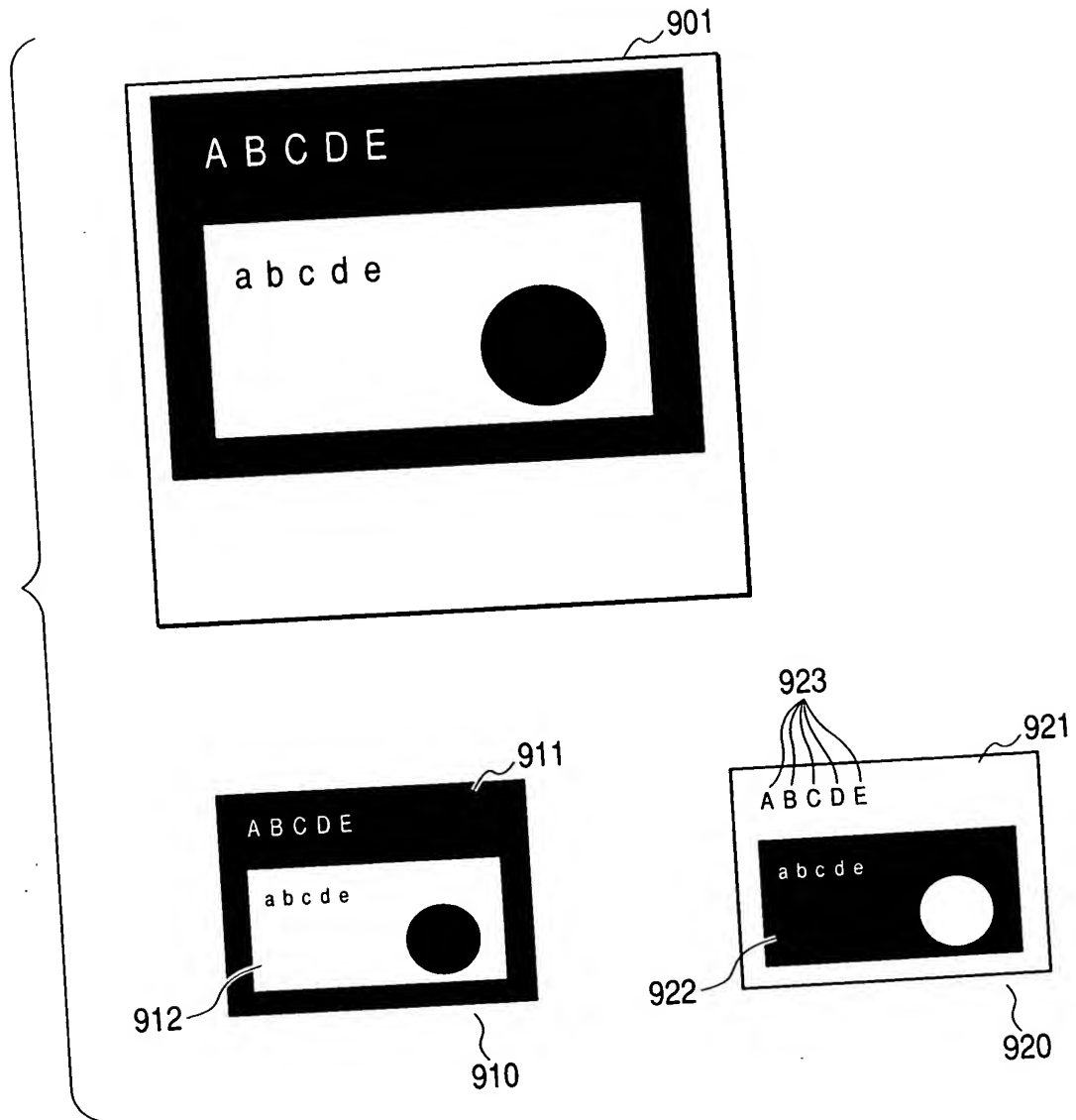


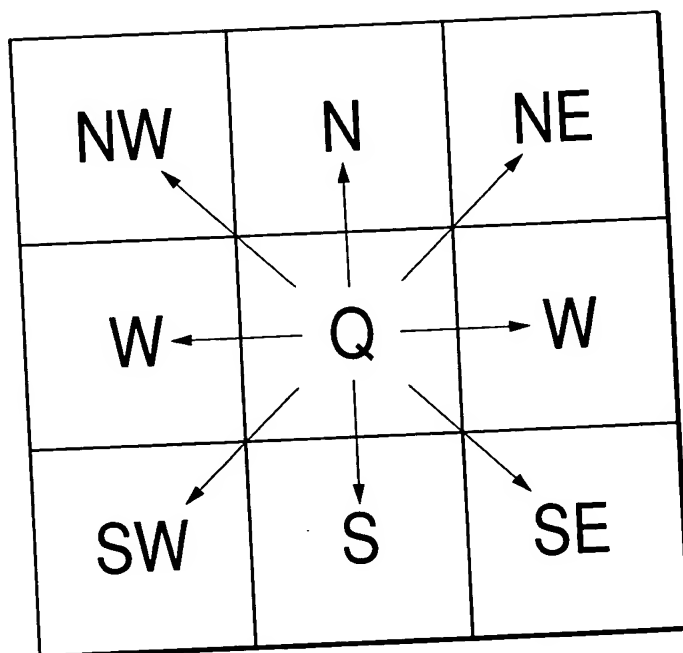
FIG. 10

FIG. 11

d \ n	1	2	3	4	5	6	7
NW	NE	N	NW	W	SW	S	SE
W	NW	W	SW	S	SE	E	
SW	NW	W	SW	S	SE	E	NE
S	SW	S	SE	E	NE	N	
SE	SW	S	SE	E	NE	N	NW
E	SE	E	NE	N	NW	W	
NE	SE	E	NE	N	NW	W	SW
N	NE	N	NW	W	SW	S	

FIG. 12

d \ n	1	2	3	4	5	6	7
NW	*1	*1	*1	*1	*2	*2	*2
W	*4	*4	*3	*3	*3	*3	
SW	*4	*4	*3	*3	*3	*3	*2
S	*3	*3	*3	*3	*2	*2	
SE	*3	*3	*3	*3	*2	*2	*2
E	*4	*4	*1	*1	*1	*1	
NE	*4	*4	*1	*1	*1	*1	*2
N	*1	*1	*1	*1	*2	*2	

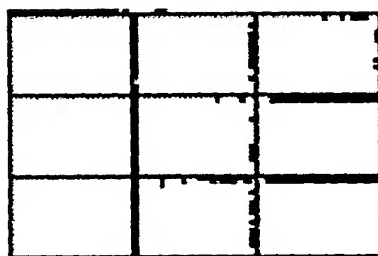
*1: LABEL C IS APPLIED WHEN LABEL A IS ALREADY APPLIED
IN OTHER CASE, LABEL B IS APPLIED

*2: LABEL C IS APPLIED

*3: LABEL C IS APPLIED WHEN LABEL C IS ALREADY APPLIED
IN OTHER CASE, LABEL A IS APPLIED

*4: LABEL D IS APPLIED

FIG. 13



EXAMPLE OF RECTANGULAR BLACK PIXEL BLOCK (LEFT)
AND NON-RECTANGULAR BLACK PIXEL BLOCK (RIGHT)

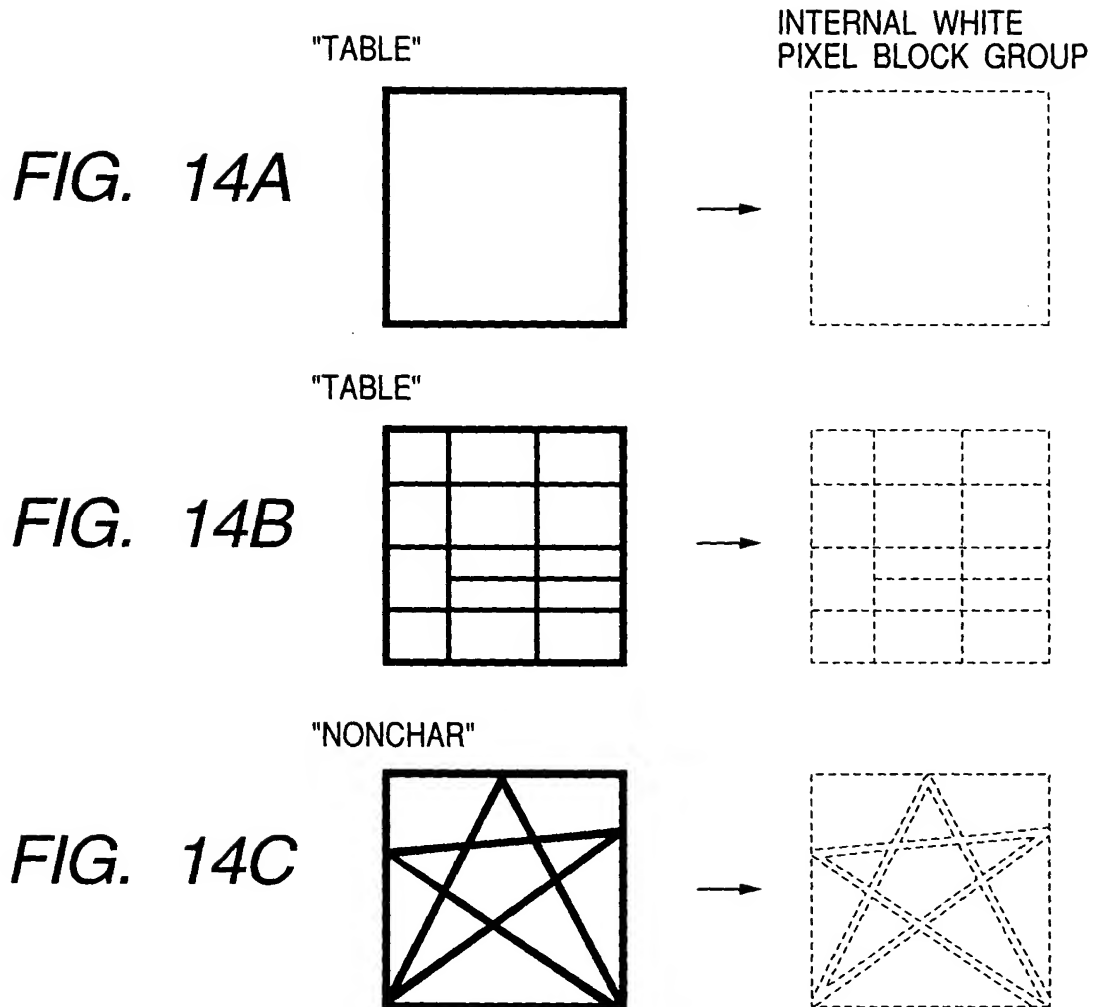


FIG. 15

NAS 2001

The Front Line of the Internet.

PREVIEW OF NAS 2001

"NAS 2001" will be held on Japan convention Center in Chiba. The exhibition displays hardware, software and services of network business.

IT Zone
Data warehouse, ERP, groupware, group information system, network administration tools. The highlight is B2B enterprise zone.

Web Zone
Miscellaneous web servers. Application service providers, Content creation software.

Network Zone
LAN/WAN router, network software, mobile computer, FAX server, Gateway. Firewall and virus scan are displayed.

PG Zone
New machines of super space machine computer HSC2001, Handheld carded character recognizer YOM21. Super server M10000 can process 300T transactions per second.

Printer can print at 60 pages per minute, the printer features a standard desktop LCD, two color paper outputs of A4 and A5, and automatic duplexing. With the high speed printing, high image resolution, and automatic duplexing, you can print at 60 pages per minute, the printer features a standard desktop LCD, two color paper outputs of A4 and A5, and automatic duplexing. With the high speed printing, high image resolution, and automatic duplexing, you can print at 60 pages per minute.

Tokyo-Nippori
Kasai-Tsudanuma
Matsubara-Hongos
Tenjiku-ko

Tokyo	
Shinjuku	
Shibuya	

222 The Quarterly magazine Jan. 2001

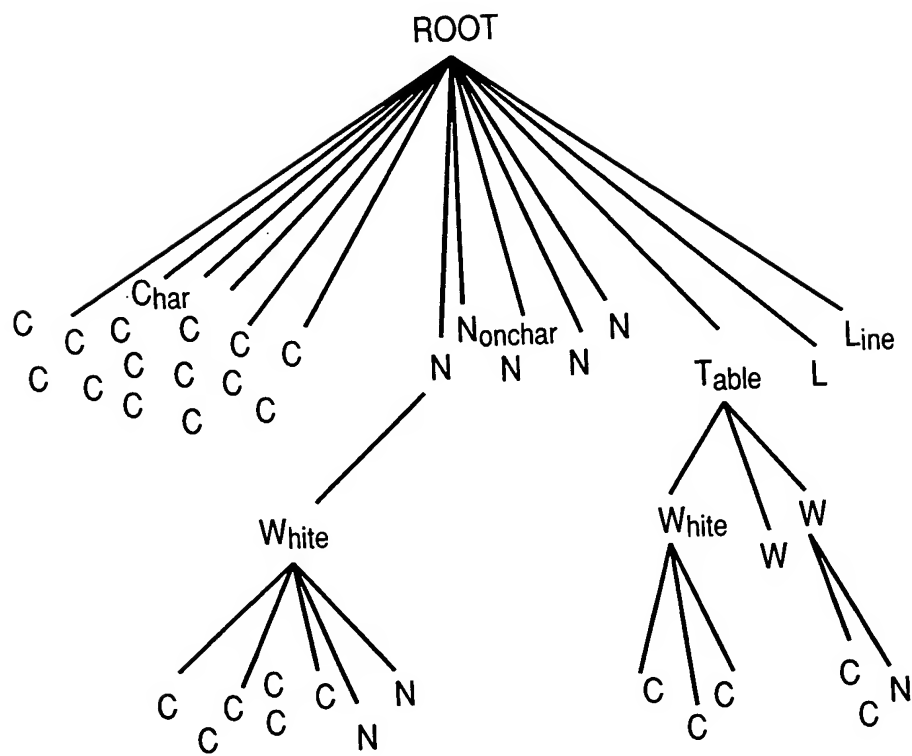
FIG. 16

FIG. 17

1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	0	0	0	1	0	0	1	0	0	0	1	1
1	1	0	1	0	1	1	0	1	0	1	0	1	1
1	1	0	0	0	1	1	0	1	0	1	0	1	1
1	1	0	1	1	1	1	0	1	0	0	0	1	1
1	1	0	1	1	1	1	1	1	1	1	1	1	1
1	1	0	1	1	1	1	1	1	1	1	1	1	0
1	1	0	1	1	1	0	0	0	0	0	0	0	0
1	1	1	1	1	1	0	0	0	0	0	0	0	0
1	1	1	1	1	1	0	0	0	0	0	0	0	0



1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	0	0	0	0	0	0	0	0	0	0	0	0	1
1	0	1	1	1	0	1	1	0	1	1	1	0	1
1	0	1	0	1	0	0	1	0	1	0	1	0	1
1	0	1	1	1	0	0	1	0	1	0	1	0	1
1	0	1	0	0	0	0	1	0	1	1	1	0	1
1	0	1	0	0	0	0	0	0	0	0	0	0	1
1	0	1	0	0	0	1	1	1	1	1	1	1	0
1	0	1	0	0	1	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0	0	0	0	0	0
1	1	1	1	1	1	0	0	0	0	0	0	0	0

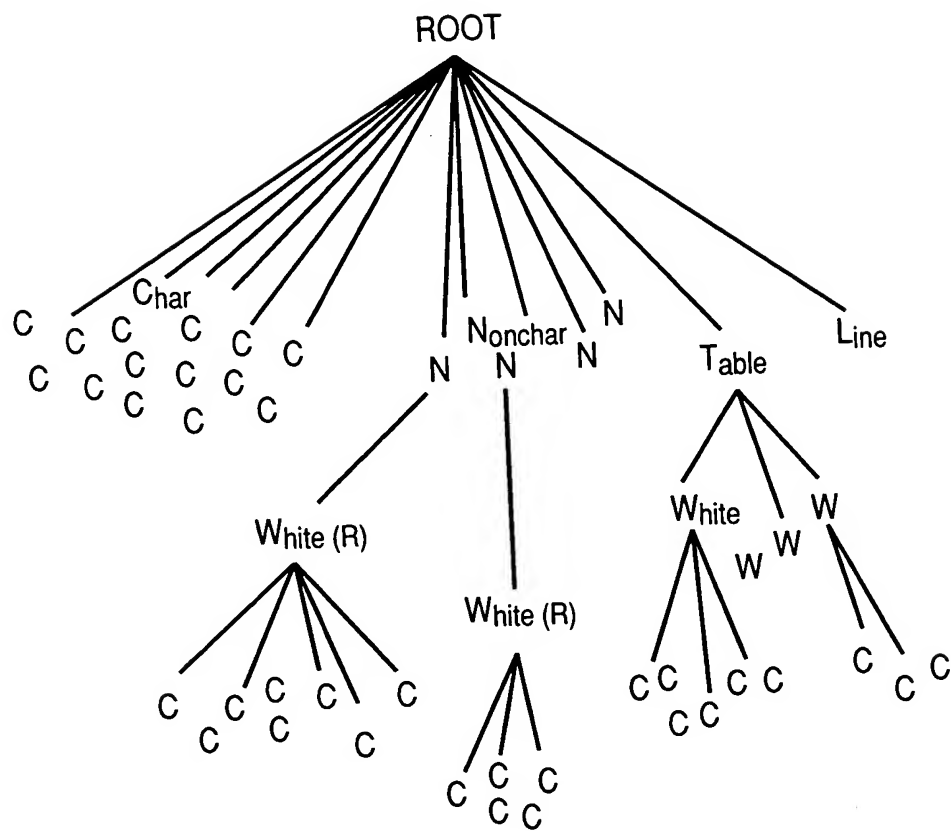
FIG. 18

FIG. 19

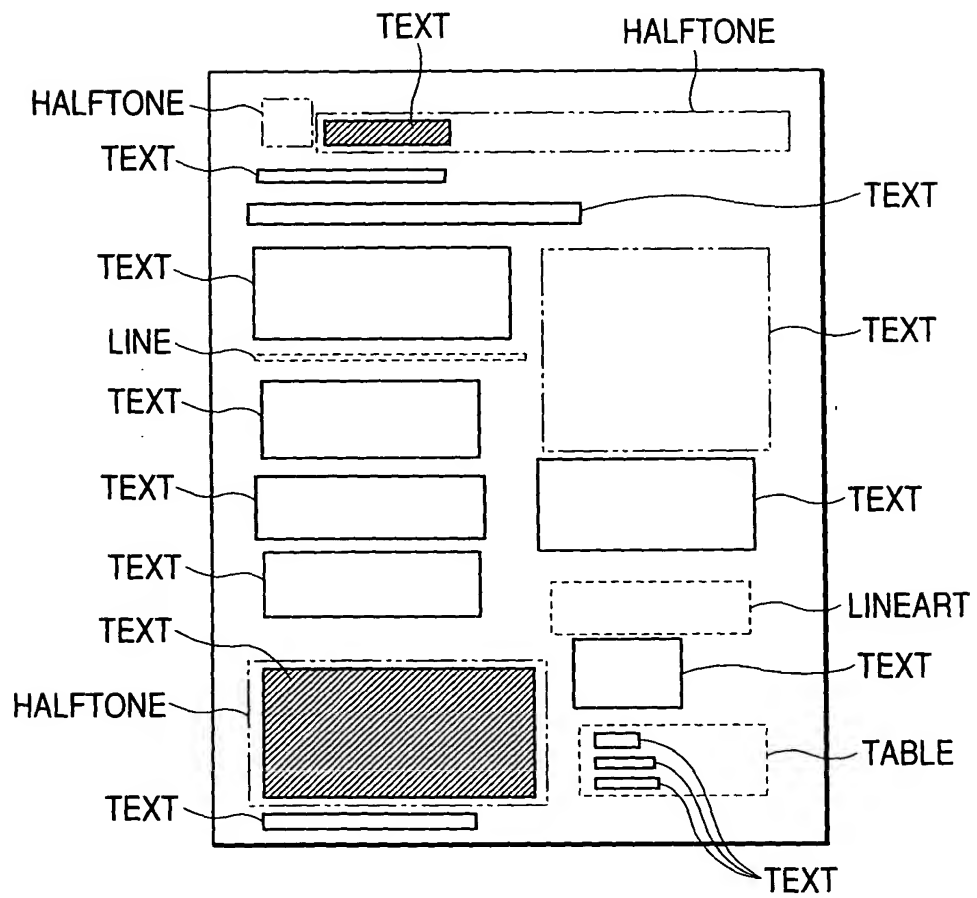


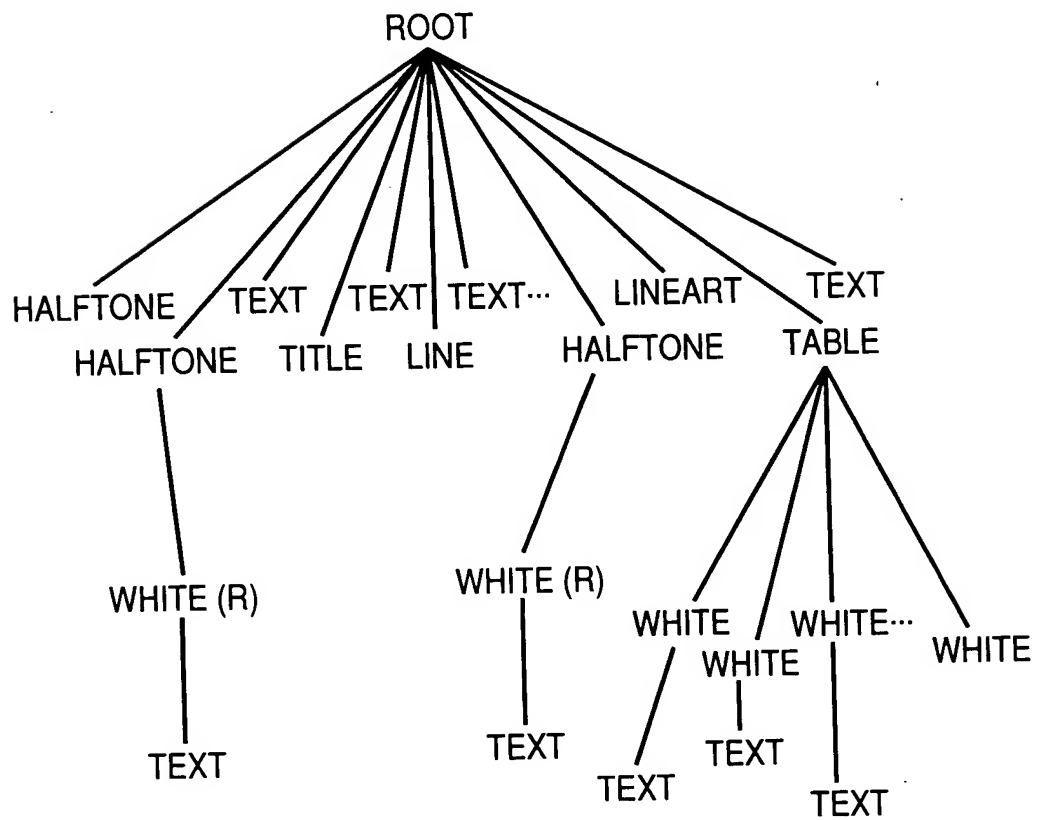
FIG. 20

FIG. 21

NAS 2001

The Front Line of the Internet

PREVIEW OF NAS 2001

"NAS 2001" will be held on Japan convention Center in Chiba. The exhibition displays hardware, software and services of network business.

IT Zone

Data warehouse, ERP groupware, new information system, network administration tools. The highlight is B2B enterprise portal.

Web Zone

Mobile internet, web servers, Application service providers, Content creation tools, etc.

Network Zone

LAN/WAN router, hub/switch, gateway, cable modem, ADSL modem, Gateway, Firewall and VPN are displayed.

PC Zone

New machines of compact desktop computer, 19" 26" 40" wide flat-panel color monitor, 40" 48" 60" 72" 84" 96" 108" 120" 132" 144" 156" 168" 180" 192" 204" 216" 228" 240" 252" 264" 276" 288" 300" 312" 324" 336" 348" 360" 372" 384" 396" 408" 420" 432" 444" 456" 468" 480" 492" 504" 516" 528" 540" 552" 564" 576" 588" 600" 612" 624" 636" 648" 660" 672" 684" 696" 708" 720" 732" 744" 756" 768" 780" 792" 804" 816" 828" 840" 852" 864" 876" 888" 900" 912" 924" 936" 948" 960" 972" 984" 996" 1000" 1008" 1016" 1024" 1032" 1040" 1048" 1056" 1064" 1072" 1080" 1088" 1096" 1104" 1112" 1120" 1128" 1136" 1144" 1152" 1160" 1168" 1176" 1184" 1192" 1200" 1208" 1216" 1224" 1232" 1240" 1248" 1256" 1264" 1272" 1280" 1288" 1296" 1304" 1312" 1320" 1328" 1336" 1344" 1352" 1360" 1368" 1376" 1384" 1392" 1400" 1408" 1416" 1424" 1432" 1440" 1448" 1456" 1464" 1472" 1480" 1488" 1496" 1500" 1508" 1516" 1524" 1532" 1540" 1548" 1556" 1564" 1572" 1580" 1588" 1596" 1600" 1608" 1616" 1624" 1632" 1640" 1648" 1656" 1664" 1672" 1680" 1688" 1696" 1700" 1708" 1716" 1724" 1732" 1740" 1748" 1756" 1764" 1772" 1780" 1788" 1796" 1800" 1808" 1816" 1824" 1832" 1840" 1848" 1856" 1864" 1872" 1880" 1888" 1896" 1900" 1908" 1916" 1924" 1932" 1940" 1948" 1956" 1964" 1972" 1980" 1988" 1996" 2000" 2008" 2016" 2024" 2032" 2040" 2048" 2056" 2064" 2072" 2080" 2088" 2096" 2100" 2108" 2116" 2124" 2132" 2140" 2148" 2156" 2164" 2172" 2180" 2188" 2196" 2200" 2208" 2216" 2224" 2232" 2240" 2248" 2256" 2264" 2272" 2280" 2288" 2296" 2300" 2308" 2316" 2324" 2332" 2340" 2348" 2356" 2364" 2372" 2380" 2388" 2396" 2400" 2408" 2416" 2424" 2432" 2440" 2448" 2456" 2464" 2472" 2480" 2488" 2496" 2500" 2508" 2516" 2524" 2532" 2540" 2548" 2556" 2564" 2572" 2580" 2588" 2596" 2600" 2608" 2616" 2624" 2632" 2640" 2648" 2656" 2664" 2672" 2680" 2688" 2696" 2700" 2708" 2716" 2724" 2732" 2740" 2748" 2756" 2764" 2772" 2780" 2788" 2796" 2800" 2808" 2816" 2824" 2832" 2840" 2848" 2856" 2864" 2872" 2880" 2888" 2896" 2900" 2908" 2916" 2924" 2932" 2940" 2948" 2956" 2964" 2972" 2980" 2988" 2996" 3000" 3008" 3016" 3024" 3032" 3040" 3048" 3056" 3064" 3072" 3080" 3088" 3096" 3100" 3108" 3116" 3124" 3132" 3140" 3148" 3156" 3164" 3172" 3180" 3188" 3196" 3200" 3208" 3216" 3224" 3232" 3240" 3248" 3256" 3264" 3272" 3280" 3288" 3296" 3300" 3308" 3316" 3324" 3332" 3340" 3348" 3356" 3364" 3372" 3380" 3388" 3396" 3400" 3408" 3416" 3424" 3432" 3440" 3448" 3456" 3464" 3472" 3480" 3488" 3496" 3500" 3508" 3516" 3524" 3532" 3540" 3548" 3556" 3564" 3572" 3580" 3588" 3596" 3600" 3608" 3616" 3624" 3632" 3640" 3648" 3656" 3664" 3672" 3680" 3688" 3696" 3700" 3708" 3716" 3724" 3732" 3740" 3748" 3756" 3764" 3772" 3780" 3788" 3796" 3800" 3808" 3816" 3824" 3832" 3840" 3848" 3856" 3864" 3872" 3880" 3888" 3896" 3900" 3908" 3916" 3924" 3932" 3940" 3948" 3956" 3964" 3972" 3980" 3988" 3996" 4000" 4008" 4016" 4024" 4032" 4040" 4048" 4056" 4064" 4072" 4080" 4088" 4096" 4100" 4108" 4116" 4124" 4132" 4140" 4148" 4156" 4164" 4172" 4180" 4188" 4196" 4200" 4208" 4216" 4224" 4232" 4240" 4248" 4256" 4264" 4272" 4280" 4288" 4296" 4300" 4308" 4316" 4324" 4332" 4340" 4348" 4356" 4364" 4372" 4380" 4388" 4396" 4400" 4408" 4416" 4424" 4432" 4440" 4448" 4456" 4464" 4472" 4480" 4488" 4496" 4500" 4508" 4516" 4524" 4532" 4540" 4548" 4556" 4564" 4572" 4580" 4588" 4596" 4600" 4608" 4616" 4624" 4632" 4640" 4648" 4656" 4664" 4672" 4680" 4688" 4696" 4700" 4708" 4716" 4724" 4732" 4740" 4748" 4756" 4764" 4772" 4780" 4788" 4796" 4800" 4808" 4816" 4824" 4832" 4840" 4848" 4856" 4864" 4872" 4880" 4888" 4896" 4900" 4908" 4916" 4924" 4932" 4940" 4948" 4956" 4964" 4972" 4980" 4988" 4996" 5000" 5008" 5016" 5024" 5032" 5040" 5048" 5056" 5064" 5072" 5080" 5088" 5096" 5100" 5108" 5116" 5124" 5132" 5140" 5148" 5156" 5164" 5172" 5180" 5188" 5196" 5200" 5208" 5216" 5224" 5232" 5240" 5248" 5256" 5264" 5272" 5280" 5288" 5296" 5300" 5308" 5316" 5324" 5332" 5340" 5348" 5356" 5364" 5372" 5380" 5388" 5396" 5400" 5408" 5416" 5424" 5432" 5440" 5448" 5456" 5464" 5472" 5480" 5488" 5496" 5500" 5508" 5516" 5524" 5532" 5540" 5548" 5556" 5564" 5572" 5580" 5588" 5596" 5600" 5608" 5616" 5624" 5632" 5640" 5648" 5656" 5664" 5672" 5680" 5688" 5696" 5700" 5708" 5716" 5724" 5732" 5740" 5748" 5756" 5764" 5772" 5780" 5788" 5796" 5800" 5808" 5816" 5824" 5832" 5840" 5848" 5856" 5864" 5872" 5880" 5888" 5896" 5900" 5908" 5916" 5924" 5932" 5940" 5948" 5956" 5964" 5972" 5980" 5988" 5996" 6000" 6008" 6016" 6024" 6032" 6040" 6048" 6056" 6064" 6072" 6080" 6088" 6096" 6100" 6108" 6116" 6124" 6132" 6140" 6148" 6156" 6164" 6172" 6180" 6188" 6196" 6200" 6208" 6216" 6224" 6232" 6240" 6248" 6256" 6264" 6272" 6280" 6288" 6296" 6300" 6308" 6316" 6324" 6332" 6340" 6348" 6356" 6364" 6372" 6380" 6388" 6396" 6400" 6408" 6416" 6424" 6432" 6440" 6448" 6456" 6464" 6472" 6480" 6488" 6496" 6500" 6508" 6516" 6524" 6532" 6540" 6548" 6556" 6564" 6572" 6580" 6588" 6596" 6600" 6608" 6616" 6624" 6632" 6640" 6648" 6656" 6664" 6672" 6680" 6688" 6696" 6700" 6708" 6716" 6724" 6732" 6740" 6748" 6756" 6764" 6772" 6780" 6788" 6796" 6800" 6808" 6816" 6824" 6832" 6840" 6848" 6856" 6864" 6872" 6880" 6888" 6896" 6900" 6908" 6916" 6924" 6932" 6940" 6948" 6956" 6964" 6972" 6980" 6988" 6996" 7000" 7008" 7016" 7024" 7032" 7040" 7048" 7056" 7064" 7072" 7080" 7088" 7096" 7100" 7108" 7116" 7124" 7132" 7140" 7148" 7156" 7164" 7172" 7180" 7188" 7196" 7200" 7208" 7216" 7224" 7232" 7240" 7248" 7256" 7264" 7272" 7280" 7288" 7296" 7300" 7308" 7316" 7324" 7332" 7340" 7348" 7356" 7364" 7372" 7380" 7388" 7396" 7400" 7408" 7416" 7424" 7432" 7440" 7448" 7456" 7464" 7472" 7480" 7488" 7496" 7500" 7508" 7516" 7524" 7532" 7540" 7548" 7556" 7564" 7572" 7580" 7588" 7596" 7600" 7608" 7616" 7624" 7632" 7640" 7648" 7656" 7664" 7672" 7680" 7688" 7696" 7700" 7708" 7716" 7724" 7732" 7740" 7748" 7756" 7764" 7772" 7780" 7788" 7796" 7800" 7808" 7816" 7824" 7832" 7840" 7848" 7856" 7864" 7872" 7880" 7888" 7896" 7900" 7908" 7916" 7924" 7932" 7940" 7948" 7956" 7964" 7972" 7980" 7988" 7996" 8000" 8008" 8016" 8024" 8032" 8040" 8048" 8056" 8064" 8072" 8080" 8088" 8096" 8100" 8108" 8116" 8124" 8132" 8140" 8148" 8156" 8164" 8172" 8180" 8188" 8196" 8200" 8208" 8216" 8224" 8232" 8240" 8248" 8256" 8264" 8272" 8280" 8288" 8296" 8300" 8308" 8316" 8324" 8332" 8340" 8348" 8356" 8364" 8372" 8380" 8388" 8396" 8400" 8408" 8416" 8424" 8432" 8440" 8448" 8456" 8464" 8472" 8480" 8488" 8496" 8500" 8508" 8516" 8524" 8532" 8540" 8548" 8556" 8564" 8572" 8580" 8588" 8596" 8600" 8608" 8616" 8624" 8632" 8640" 8648" 8656" 8664" 8672" 8680" 8688" 8696" 8700" 8708" 8716" 8724" 8732" 8740" 8748" 8756" 8764" 8772" 8780" 8788" 8796" 8800" 8808" 8816" 8824" 8832" 8840" 8848" 8856" 8864" 8872" 8880" 8888" 8896" 8900" 8908" 8916" 8924" 8932" 8940" 8948" 8956" 8964" 8972" 8980" 8988" 8996" 9000" 9008" 9016" 9024" 9032" 9040" 9048" 9056" 9064" 9072" 9080" 9088" 9096" 9100" 9108" 9116" 9124" 9132" 9140" 9148" 9156" 9164" 9172" 9180" 9188" 9196" 9200" 9208" 9216" 9224" 9232" 9240" 9248" 9256" 9264" 9272" 9280" 9288" 9296" 9300" 9308" 9316" 9324" 9332" 9340" 9348" 9356" 9364" 9372" 9380" 9388" 9396" 9400" 9408" 9416" 9424" 9432" 9440" 9448" 9456" 9464" 9472" 9480" 9488" 9496" 9500" 9508" 9516" 9524" 9532" 9540" 9548" 9556" 9564" 9572" 9580" 9588" 9596" 9600" 9608" 9616" 9624" 9632" 9640" 9648" 9656" 9664" 9672" 9680" 9688" 9696" 9700" 9708" 9716" 9724" 9732" 9740" 9748" 9756" 9764" 9772" 9780" 9788" 9796" 9800" 9808" 9816" 9824" 9832" 9840" 9848" 9856" 9864" 9872" 9880" 9888" 9896" 9900" 9908" 9916" 9924" 9932" 9940" 9948" 9956" 9964" 9972" 9980" 9988" 9996" 10000" 10008" 10016" 10024" 10032" 10040" 10048" 10056" 10064" 10072" 10080" 10088" 10096" 10100" 10108" 10116" 10124" 10132" 10140" 10148" 10156" 10164" 10172" 10180" 10188" 10196" 10200" 10208" 10216" 10224" 10232" 10240" 10248" 10256" 10264" 10272" 10280" 10288" 10296" 10300" 10308" 10316" 10324" 10332" 10340" 10348" 10356" 10364" 10372" 10380" 10388" 10396" 10400" 10408" 10416" 10424" 10432" 10440" 10448" 10456" 10464" 10472" 10480" 10488" 10496" 10500" 10508" 10516" 10524" 10532" 10540" 10548" 10556" 10564" 10572" 10580" 10588" 10596" 10600" 10608" 10616" 10624" 10632" 10640" 10648" 10656" 10664" 10672" 10680" 10688" 10696" 10700" 10708" 10716" 10724" 10732" 10740" 10748" 10756" 10764" 10772" 10780" 10788" 10796" 10800" 10808" 10816" 10824" 10832" 10840" 10848" 10856" 10864" 10872" 10880" 10888" 10896" 10900" 10908" 10916" 10924" 10932" 10940" 10948" 10956" 10964" 10972" 10980" 10988" 10996" 11000" 11008" 11016" 11024" 11032" 11040" 11048" 11056" 11064" 11072" 11080" 11088" 11096" 11100" 11108" 11116" 11124" 11132" 11140" 11148" 11156" 11164" 11172" 11180" 11188" 11196" 11200" 11208" 11216" 11224" 11232" 11240" 11248" 11256" 11264" 11272" 11280" 11288" 11296" 11300" 11308" 11316" 11324" 11332" 11340" 11348" 11356" 11364" 11372" 11380" 11388" 11396" 11400" 11408" 11416" 11424" 11432" 11440" 11448" 11456" 11464" 11472" 11480" 11488" 11496" 11500" 11508" 11516" 11524" 11532" 11540" 11548" 11556" 11564" 11572" 11580" 11588" 11596" 11600" 11608" 11616" 11624" 11632" 11640" 11648" 11656" 11664" 11672" 11680" 11688" 11696" 11700" 11708" 11716" 11724" 11732" 11740" 11748" 11756" 11764" 11772" 11780" 11788" 11796" 11800" 11808" 11816" 11824" 11832" 11840" 11848" 11856" 11864" 11872" 11880" 11888" 11896" 11900" 11908" 11916" 11924" 11932" 11940" 11948" 11956" 11964" 11972" 11980" 11988" 11996" 12000" 12008" 12016" 12024" 12032" 12040" 12048" 12056" 12064" 12072" 12080" 12088" 12096" 12100" 12108" 12116" 12124" 12132" 12140" 12148" 12156" 12164" 12172" 12180" 12188" 12196" 12200" 12208" 12216" 12224" 12232" 12240" 12248" 12256" 12264" 12272" 12280" 12288" 12296" 12300" 12308" 12316" 12324" 12332" 12340" 12348" 12356" 12364" 12372" 12380" 12388" 12396" 12400" 12408" 12416" 12424" 12432" 12440" 12448" 12456" 12464" 12472" 12480" 12488" 12496" 12500" 12508" 12516" 12524" 12532" 12540" 12548" 12556" 12564" 12572" 12580" 12588" 12596" 12600" 12608" 12616" 12624" 12632" 12640" 12648" 12656" 12664" 12672" 12680" 12688" 12696" 12700" 12708" 12716" 12724" 12732" 12740" 12748" 12756" 12764" 12772" 12780" 12788" 12796" 12800" 12808" 12816" 12824" 12832" 12840" 12848" 12856" 12864" 12872" 12880" 12888" 12896" 12900" 12908" 12916" 12924" 12932" 12940" 12948" 12956" 12964" 12972" 12980" 12988" 12996" 13000" 13008" 13016" 13024" 13032" 13040" 13048" 13056" 13064" 13072" 13080" 13088" 13096" 13100" 13108" 13116" 13124" 13132" 13140" 13148" 13156" 13164" 13172" 13180" 13188" 13196" 13200" 13208" 13216" 13224" 13232" 13240" 13248" 13256" 13264" 13272" 13280" 13288" 13296" 13300" 13308" 13316" 13324" 13332" 13340" 13348" 13356" 13364" 13372" 13380" 13388" 13396" 13400" 13408" 13416" 13424" 13432" 13440" 13448" 13456" 13464" 13472" 13480" 13488" 13496" 13500" 13508" 13516" 13524" 13532" 13540" 13548" 13556" 13564" 13572" 13580" 13588" 13596" 13600" 13608" 13616" 13624" 13632" 13640" 13648" 13656" 13664" 13672" 13680" 13688" 13696" 13700" 13708" 13716" 13724" 13732" 13740" 13748" 13756" 13764" 13772" 13780" 13788" 13796" 13800" 13808" 13816" 13824" 13832" 13840" 13848" 13856" 13864" 13872" 13880" 13888" 13896" 13900" 13908" 13916" 13924" 13932" 13940" 13948" 13956" 13964" 13972" 13980" 13988" 13996" 14000" 14008" 14016" 14024" 14032" 14040" 14048" 14056" 14064" 14072" 14080" 14088" 14096" 14100" 14108" 14116" 14124" 14132" 14140" 14148" 14156" 14164" 14172" 14180" 14188" 14196" 14200" 14208" 14216" 14224" 14232" 14240" 14248" 14256" 14264" 14272" 14280" 14288" 14296" 14300" 14308" 14316" 14324" 14332" 14340" 14348" 14356" 14364" 14372" 14380" 14388" 14396" 14400" 14408" 14416" 14424" 14432" 14440" 14448" 14456" 14464" 14472" 14480" 14488" 14496" 14500" 14508" 14516" 14524" 14532" 14540" 14548" 14556" 14564" 14572" 14580" 14588" 14596" 14600" 14608" 14616" 14624" 14632" 14640" 14648" 14656" 14664" 14672" 146

FIG. 22

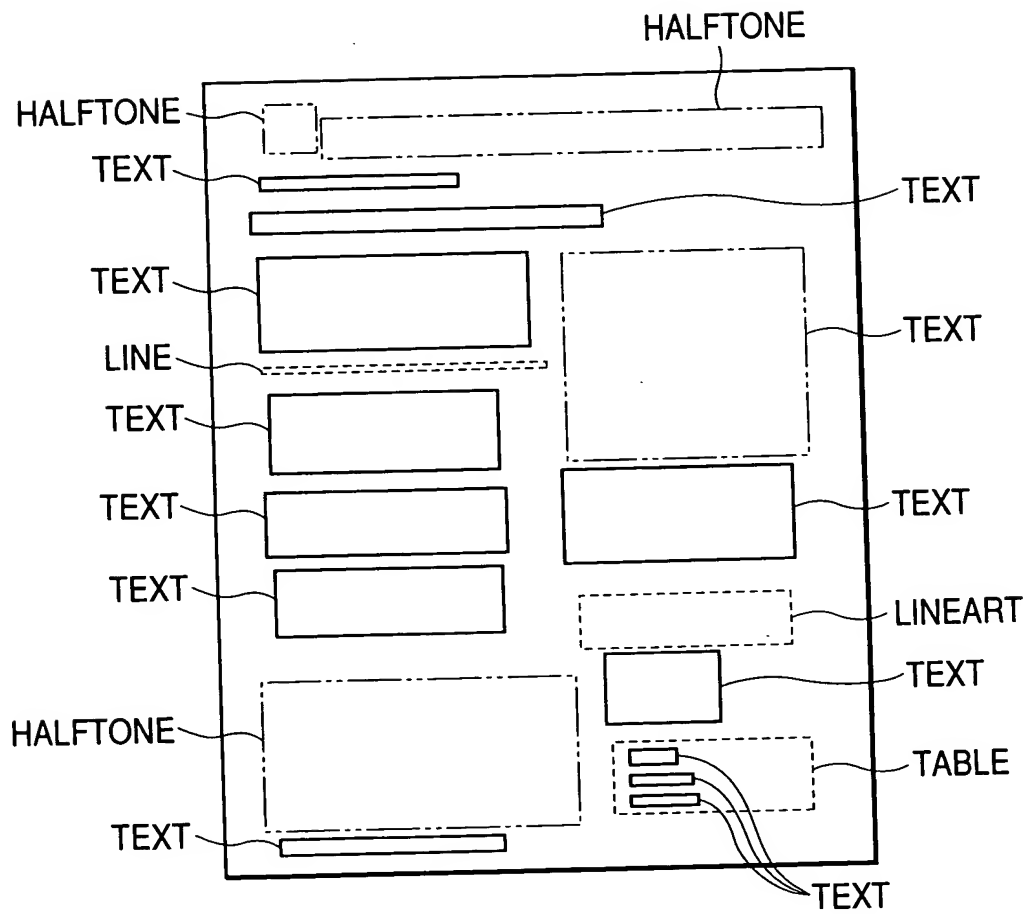


FIG. 23